

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: LUMARK

Report Number: P884621

Luminaire Tested: **NAV-SB5C-735-U-T4FT**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884621  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-735-U-T4FT  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

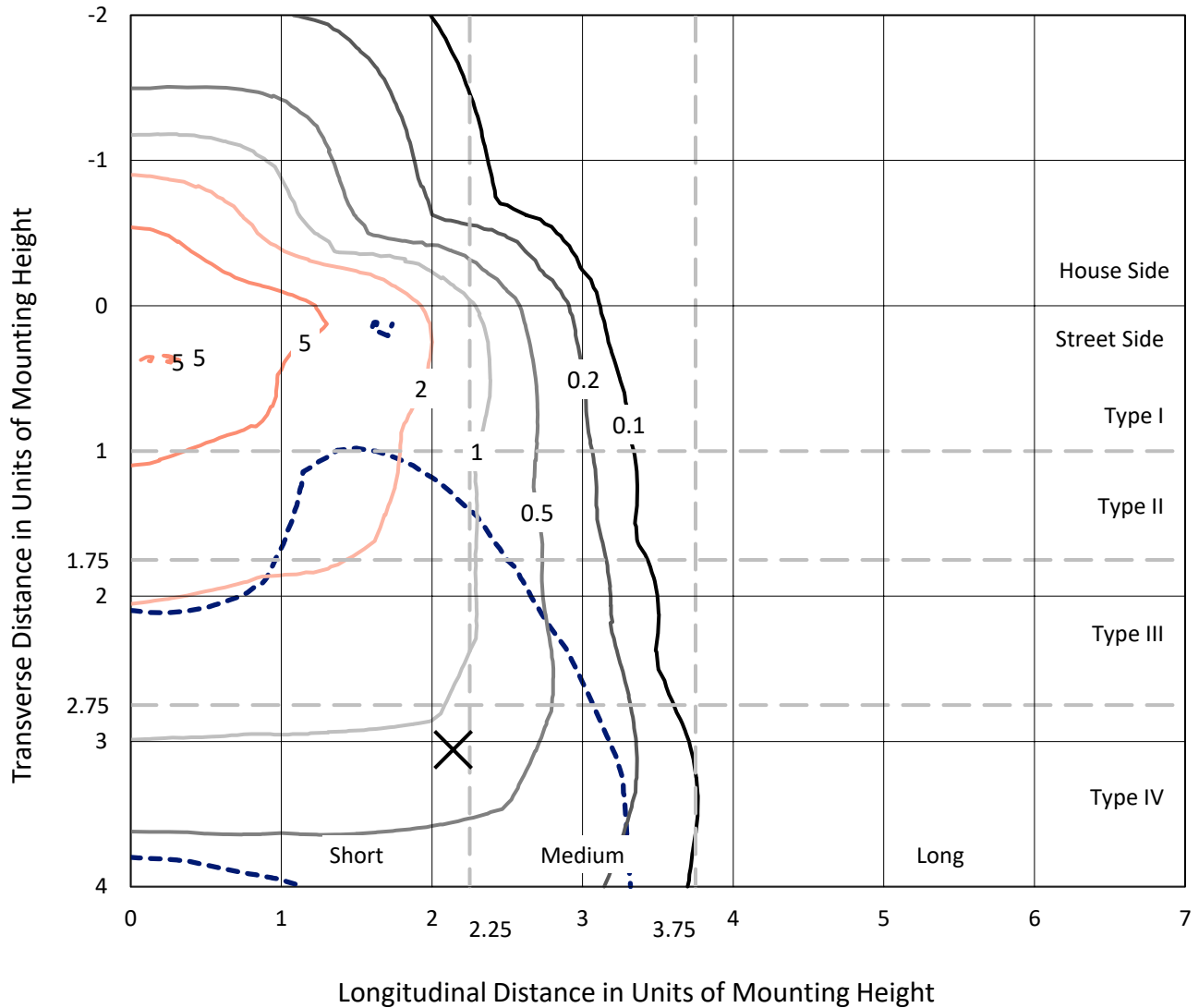
Lumens per Lamp: N/A  
Luminaire Lumens: 37560 lumens  
Efficiency: N/A  
Efficacy: 150.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 249.5  
Input Voltage (V): 120.0  
Input Current (Ain): 2.116  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 7.885  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

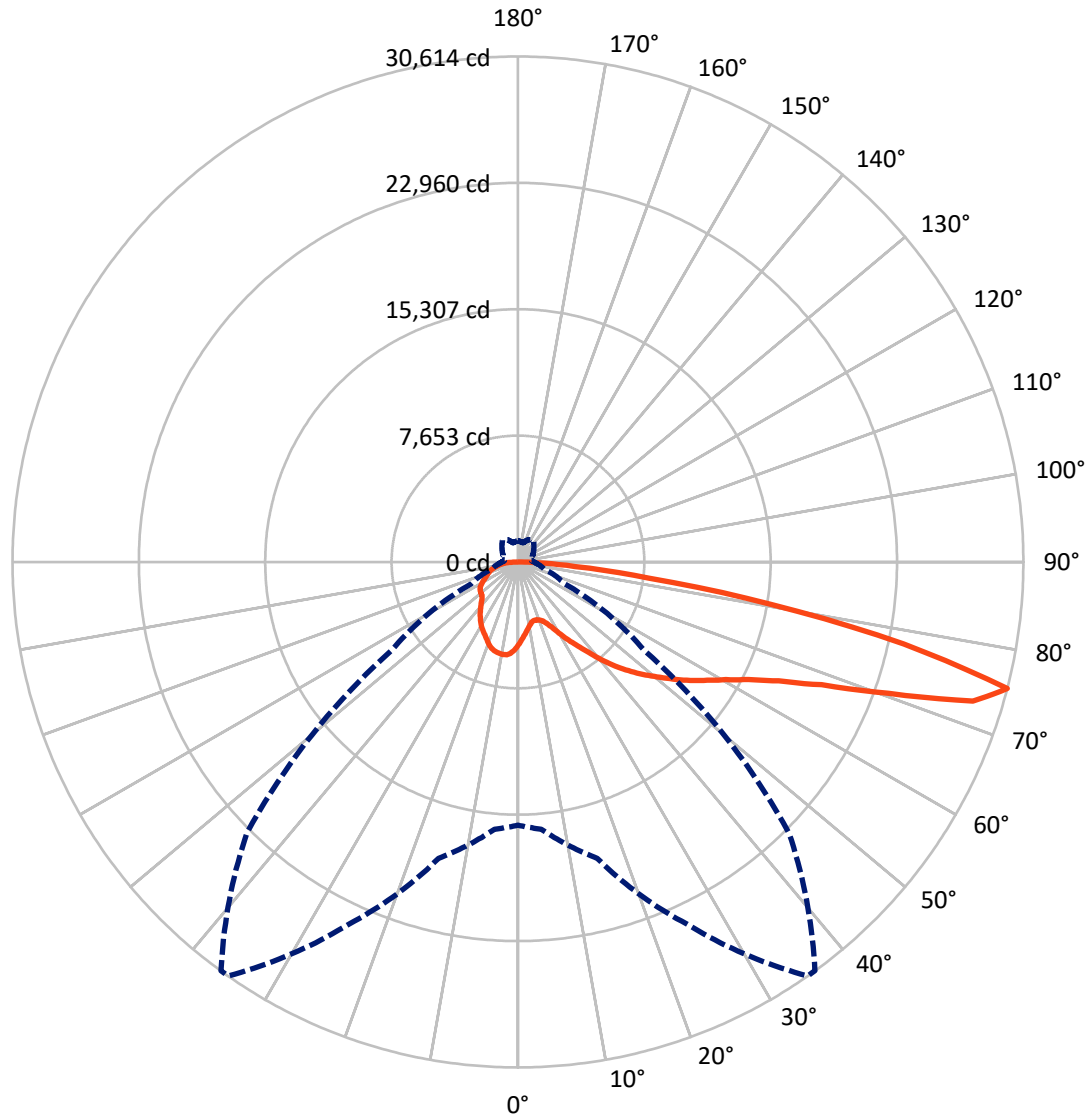
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8938.3	0.0	8938.3
	% Fixture	23.8	0.0	23.8
<b>Street Side</b>	Lumens	28621.7	0.0	28621.7
	% Fixture	76.2	0.0	76.2
<b>Total</b>	Lumens	37560.0	0.0	37560.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	473.9	1.3
10°-20°	1366.9	3.6
20°-30°	2295.4	6.1
30°-40°	3567.3	9.5
40°-50°	5294.8	14.1
50°-60°	7309.9	19.5
60°-70°	8868.5	23.6
70°-80°	7329.2	19.5
80°-90°	1054.2	2.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	37560.0	100.0
0°-180°	37560.0	100.0

**Coefficient of Utilization**



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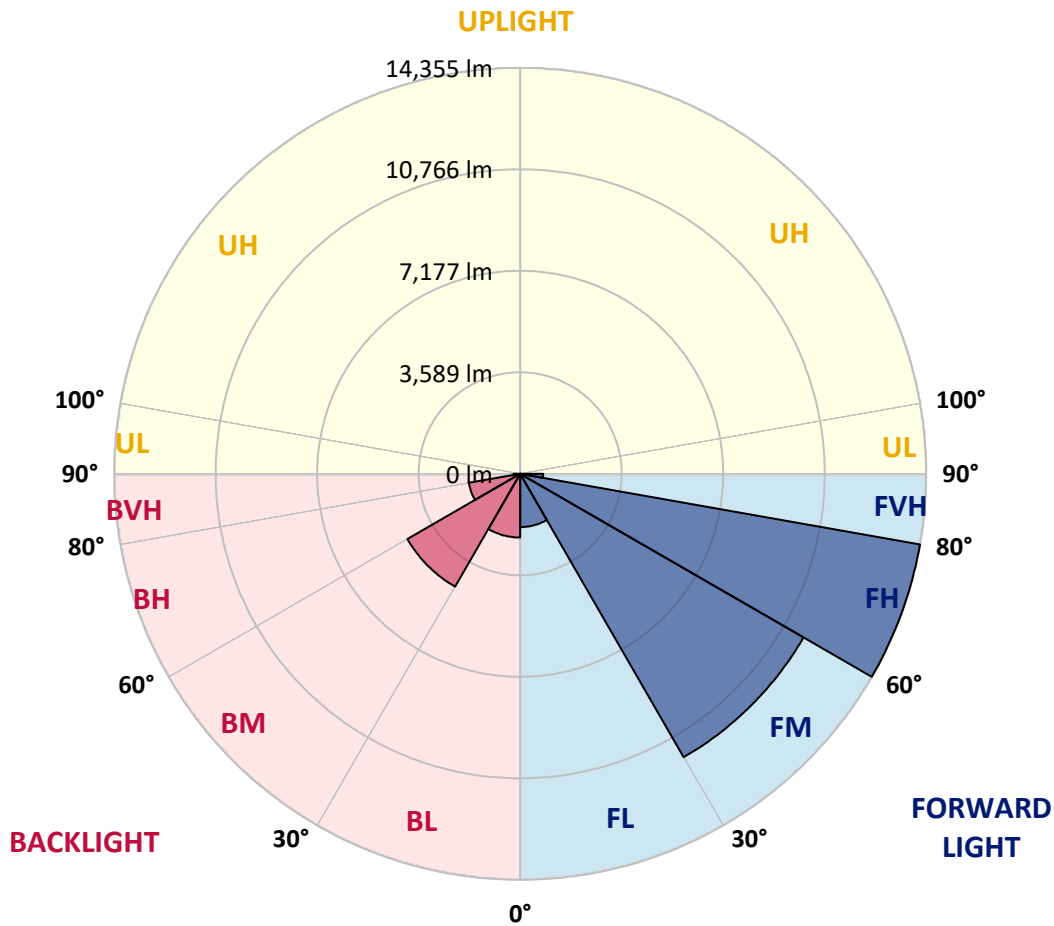
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1883.6	5.0			
FM (30°-60°)	11566.4	30.8			
FH (60°-80°)	14354.9	38.2			G5
FVH (80°-90°)	816.8	2.2			G5
BL (0°-30°)	2252.6	6.0	B3/2500		
BM (30°-60°)	4605.6	12.3	B3/5000		
BH (60°-80°)	1842.8	4.9	B3/2500		G3/2500
BVH (80°-90°)	237.4	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	5005.1	5005.1	5005.1	5005.1	5005.1	5005.1	5005.1	5005.1	5005.1	5005.1	5005.1
2.5°	4615.3	4643.7	4655.9	4649.8	4680.2	4676.2	4718.8	4771.6	4844.7	4915.8	5019.3
5°	4259.9	4290.4	4316.8	4341.2	4400.0	4418.3	4485.3	4586.8	4720.9	4856.9	5027.5
7.5°	3929.0	3955.4	3996.0	4040.6	4140.1	4158.4	4270.1	4428.5	4615.3	4814.3	5049.8
10°	3658.9	3685.3	3728.0	3778.7	3902.6	3924.9	4067.0	4278.2	4521.9	4773.6	5074.2
12.5°	3543.2	3551.3	3575.7	3626.4	3734.0	3748.3	3904.6	4146.2	4430.5	4743.2	5110.7
15°	3537.1	3553.3	3555.4	3581.8	3671.1	3677.2	3821.4	4061.0	4373.6	4737.1	5165.5
17.5°	3598.0	3610.2	3591.9	3608.2	3683.3	3693.4	3807.1	4020.3	4355.4	4763.5	5258.9
20°	3760.4	3770.6	3715.8	3693.4	3748.3	3756.4	3868.1	4046.7	4373.6	4818.3	5386.9
22.5°	4105.6	4111.7	3977.7	3886.3	3890.4	3894.5	3991.9	4154.4	4444.7	4917.8	5549.3
25°	4643.7	4639.6	4426.4	4249.8	4148.3	4125.9	4190.9	4329.0	4564.5	5049.8	5758.4
27.5°	5273.1	5242.7	5029.5	4765.5	4544.2	4511.7	4497.5	4556.4	4735.1	5224.4	6014.3
30°	5983.8	5955.4	5725.9	5380.8	5074.2	5021.4	4887.4	4856.9	4988.9	5462.0	6369.6
32.5°	6763.5	6745.2	6471.1	6052.8	5642.7	5581.8	5356.4	5275.2	5378.7	5821.4	6865.0
35°	7417.3	7401.1	7173.7	6743.2	6241.7	6166.6	5937.1	5845.7	5898.5	6282.3	7512.8
37.5°	8008.2	8000.1	7805.2	7466.1	6948.3	6856.9	6599.0	6568.6	6558.4	6889.4	8298.6
40°	8556.4	8536.1	8333.1	8154.4	7770.6	7687.4	7460.0	7433.6	7356.4	7636.6	9187.9
42.5°	9163.5	9110.7	8816.3	8733.1	8629.5	8560.5	8424.4	8428.5	8257.9	8479.3	10130.0
45°	9659.0	9628.5	9326.0	9277.2	9388.9	9360.5	9478.3	9508.7	9177.8	9362.5	11108.7
47.5°	10191.0	10162.5	9906.7	9872.2	10174.7	10182.8	10599.1	10609.2	10075.2	10280.3	12089.5
50°	10846.8	10806.2	10552.4	10595.0	10934.1	10964.6	11726.0	11657.0	10901.6	11212.3	13062.1
52.5°	11279.3	11303.7	11248.8	11317.9	11780.8	11809.3	12834.6	12658.0	11719.9	12132.1	14016.4
55°	11598.1	11646.8	11817.4	11975.7	12674.2	12702.7	13880.3	13610.3	12398.1	12984.9	14913.8
57.5°	12008.2	11939.2	12258.0	12566.6	13523.0	13598.1	14897.6	14528.1	12999.1	13719.9	15529.1
60°	12597.1	12548.3	12796.1	13252.9	14473.2	14593.0	15973.8	15354.5	13439.7	14302.7	15648.9
62.5°	13791.0	13669.2	13707.7	14111.8	15671.2	15829.6	17188.0	16075.3	13659.0	14530.1	15007.3
65°	15575.8	15366.6	15171.7	15451.9	17358.5	17514.9	18558.6	16641.8	13577.8	14089.5	13303.7
67.5°	17823.5	17616.4	17376.8	17640.8	19843.8	19967.7	20249.9	16960.6	12938.2	12392.0	10292.5
70°	19677.3	19600.2	19886.5	20972.8	23813.4	23817.5	22418.5	16696.6	11185.9	8785.9	5955.4
72.5°	19431.7	19385.0	20893.6	24252.0	28816.5	28708.9	24471.3	14698.6	7535.1	3963.5	2231.5
75°	15941.3	16243.8	18580.9	24193.1	30613.5	30599.3	23214.4	9344.3	3116.8	1642.7	1153.3
77.5°	8548.3	9027.5	12063.1	17862.1	23898.7	24258.1	16321.0	3269.1	1338.1	1051.8	798.0
80°	2787.8	3206.1	4808.2	9094.5	15529.1	15462.1	6995.0	1283.3	915.7	745.2	552.3
82.5°	1183.8	1232.5	2148.2	4294.5	7969.6	7845.8	2227.4	737.1	643.7	509.6	341.1
85°	462.9	517.8	948.2	1985.8	3451.8	3376.7	804.1	365.5	412.2	333.0	203.0
87.5°	152.3	184.8	339.1	680.2	1074.1	1035.5	197.0	125.9	178.7	152.3	73.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5005.1	5005.1	5005.1	5005.1	5005.1	5005.1	5005.1	5005.1	5005.1	5005.1	5005.1
2.5°	5047.8	5080.3	5118.8	5175.7	5224.4	5265.0	5307.7	5334.1	5344.2	5374.7	5372.6
5°	5084.3	5155.4	5250.8	5344.2	5435.6	5490.4	5539.1	5563.5	5585.8	5602.1	5606.1
7.5°	5145.2	5236.6	5386.9	5508.7	5585.8	5630.5	5663.0	5654.9	5663.0	5667.1	5673.2
10°	5198.0	5325.9	5504.6	5620.4	5679.2	5681.3	5673.2	5644.7	5630.5	5632.5	5636.6
12.5°	5261.0	5403.1	5596.0	5693.5	5709.7	5665.0	5630.5	5581.8	5563.5	5555.4	5551.3
15°	5346.2	5508.7	5695.5	5732.0	5691.4	5634.6	5575.7	5496.5	5455.9	5423.4	5433.6
17.5°	5449.8	5628.5	5772.6	5746.2	5658.9	5565.5	5470.1	5350.3	5267.1	5232.5	5234.6
20°	5594.0	5754.4	5831.5	5715.8	5583.8	5441.7	5279.2	5133.0	5055.9	5021.4	5017.3
22.5°	5768.6	5922.9	5888.4	5663.0	5476.2	5248.8	5045.7	4938.1	4899.5	4875.2	4879.2
25°	5977.7	6109.7	5929.0	5585.8	5299.5	4992.9	4836.6	4802.1	4783.8	4765.5	4765.5
27.5°	6249.8	6320.9	5959.4	5472.1	5023.4	4720.9	4664.0	4670.1	4664.0	4633.5	4639.6
30°	6609.2	6595.0	5987.9	5287.4	4706.6	4475.2	4479.2	4505.6	4509.7	4489.4	4499.5
32.5°	7082.3	6938.1	6002.1	5047.8	4404.1	4259.9	4264.0	4292.4	4312.7	4278.2	4294.5
35°	7654.9	7338.1	5979.8	4747.3	4170.6	4054.9	4024.4	4032.5	4038.6	4006.1	4028.5
37.5°	8322.9	7786.9	5880.3	4414.3	3977.7	3853.8	3788.9	3734.0	3701.6	3671.1	3691.4
40°	9055.9	8276.2	5697.5	4089.4	3762.5	3640.6	3543.2	3439.6	3330.0	3289.4	3307.6
42.5°	9823.4	8779.8	5476.2	3778.7	3514.8	3415.3	3311.7	3161.5	2997.0	2913.7	2923.9
45°	10619.4	9295.5	5258.9	3472.1	3260.9	3218.3	3098.5	2917.8	2739.1	2633.5	2625.4
47.5°	11399.1	9782.8	4940.1	3163.5	3023.4	3070.1	2976.7	2810.2	2611.2	2444.7	2426.4
50°	12144.3	10239.7	4418.3	2850.8	2830.5	3025.4	2936.1	2696.5	2469.1	2255.9	2237.6
52.5°	12883.4	10609.2	3750.3	2566.5	2726.9	3013.2	2883.3	2619.3	2341.1	2117.8	2093.4
55°	13510.8	10800.1	3106.6	2322.9	2576.7	2909.7	2820.3	2527.9	2160.4	1922.9	1902.6
57.5°	13868.2	10645.8	2570.6	2083.3	2369.6	2739.1	2712.7	2333.0	1945.2	1762.5	1738.1
60°	13713.8	10020.4	2132.0	1874.1	2172.6	2554.3	2525.9	2140.1	1780.7	1608.1	1583.8
62.5°	12863.1	8828.5	1784.8	1691.4	1993.9	2365.5	2339.1	1991.9	1654.8	1488.3	1461.9
65°	11149.3	7181.8	1514.7	1539.1	1813.2	2138.1	2176.7	1868.0	1555.3	1392.9	1366.5
67.5°	8503.6	5202.1	1303.6	1407.1	1636.6	1914.7	2026.4	1778.7	1472.1	1317.8	1293.4
70°	4846.7	2954.3	1124.9	1279.2	1480.2	1707.6	1910.7	1707.6	1382.8	1254.8	1238.6
72.5°	1837.6	1356.4	972.6	1151.3	1330.0	1533.0	1782.8	1596.0	1279.2	1183.8	1167.5
75°	980.7	826.4	818.3	1001.0	1157.4	1362.4	1622.4	1486.3	1202.0	1250.8	1291.4
77.5°	668.0	584.8	684.3	856.9	968.5	1173.6	1451.8	1319.8	1041.6	1037.6	956.4
80°	462.9	414.2	556.4	690.4	749.2	986.8	1267.0	1133.0	848.7	791.9	757.4
82.5°	278.2	270.1	416.2	515.7	530.0	761.4	1049.8	950.3	694.4	605.1	609.1
85°	152.3	160.4	266.0	302.5	308.6	532.0	822.3	735.0	534.0	448.7	452.8
87.5°	42.6	54.8	97.5	119.8	148.2	276.1	489.3	436.6	268.0	186.8	186.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)